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APPROACHES TO A REDEFINITION OF LANGUAGE LEARNING.

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MANY ATTEMPTS HAVE BEEN MADE TO DEFINE "AUDIO-LINGUAL METHOD" FROM THE POINTS OF VIEW OF TWO COMPETING THEORIES OF LEARNING, THE BEHAVIORISTIC AND THE COGNITIVE. NONE HAS SUCCEEDED IN DEFINING SOME OF THE SPECIFIC TENETS TO BE ESTABLISHED FOR LANGUAGE LEARNING AS REQUIRED BY AN IMPROVED THEORY OF LANGUAGE LEARNING. A FLEXIBLE AND PROGRESSIVE APPROACH IS NEEDED, WHICH IS OPEN TO NEW DEVELOPMENTS AND CAN INCORPORATE AND ACCOUNT FOR RECENT RESEARCH IN SUCH AREAS AS (1) A REDEFINITION OF THE RELATIONSHIP, ORDER, AND SEQUENCE OF THE ENCODING AND DECODING PROCESSES OF LANGUAGE LEARNING, (2) THE EFFECTIVENESS OF CONTRASTIVE ANALYSIS IN LANGUAGE TEACHING, (3) SOUND DISCRIMINATION, AND (4) MEMORY SPAN. SUGGESTIONS FOR EFFECTIVE CONTROL OF IMPROVED AUDIO-LINGUAL PROGRAMS INCLUDE RECOMMENDATIONS ON THE TEACHING OF SPEECH PATTERNS, VOCABULARY, DRILL SENTENCES, AND GRAMMATICAL DISCRIMINATION, AS WELL AS STATEMENTS ON GENERAL PRINCIPLES OF METHOD, STRUCTURATION OF THE TEXT, AND CORRELATION BETWEEN TEACHING TEXT AND PATTERN PRACTICE. A BIBLIOGRAPHY IS INCLUDED. THIS ARTICLE APPEARED IN "CONTACT," NUMBER 9, DECEMBER 1966, PAGES 11-18. (JH)

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Approaches to a Redefinition of Language Learning

Psycholinguistic research and empirical evidence of Applied Linguistics in language teaching during the past decade, especially since the emergence of the language laboratory, the teaching machine and programmed instruction, point to the global need of an acceptable new theory of language learning. Some psychologists have attempted to analyse some yet unknown factors in the complex process of language acquisition from S (Stimulus) via O (Organism) to R (Response)[30] [18] whereas others have neglected the O in favor of an elaborate definition of instrumental learning or the conditioning of operant behavior[25]. Two basic theories of learning nowadays compete in their claim to explain language behavior, the behavioristic school of thought (with the modified behavioristic school) and the cognitive school. Numerous attempts have been made to define the "audio-lingual method" and its major assumptions on the basis of the behavioristic theory of learning. More than enough arguments have been going on about methods and their definition which in turn caused a host of misunderstanding and confusion. We should be reminded of Nelson Brooks' statement: "No single method is preferred. Many different methods are found to be effective with this important proviso — objectives must remain constant[3]." We may also accept the new term Fundamental Skills Method (FSM) as suggested by PMLA but we will still fail to define some of the specific tenets to be established for language teaching as required by an improved theory of language learning.

To start out with a generally accepted goal of foreign language learning we could quote Erasmus of Rotterdam who in 1522 said: "Express yourself in an original way, be conspicuous, clear and eloquent, but use models[10]." To this we could add a few postulates as guidelines for language learning and language teaching taken from the Analytical Didactic of Comenius, written in 1648:

1. Do not undertake to instruct a pupil unless his appetite has been keenly whetted.
2. The student should work and the teacher should direct.
3. When there is no guidance, imitation is neither easy nor certain.
4. Where there is no imitation, guidance for imitation and even models are useless.

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5. The task of the teacher is to present the model, explain it and show how to imitate it; the task of the student is to pay attention, comprehend and imitate.

6. Whatever can be taught and learned in one procedure should never be subdivided.

7. We should observe everything with as many senses as possible.

8. Strength of memory derives primarily from strength of impression.

9. Impressions received by a mind affected by emotions are deep and lasting[8]).

Comenius wrote these axioms as "a foundation for the newest method of teaching languages" proving ingenious intuition and outstanding experience in teaching Latin, the major foreign language of his time. Any modern psycho-linguist or language teacher reading his book will be puzzled at the inherent parallelism of fiction and truth as it is represented in his treatment as well as in modern language didactics.

As Spolsky states, "there may not in fact be such a thing as an effective teaching method and the goal of native-like linguistic competence may ultimately be impossible"[26]), but in this scientific age every attempt should be made to collect and analyse experimental data in approaching a new theory of language learning. Some of these data seem to point to the validity of several — and not only one — psychological or psycho-linguistic theories for a process as complex as language learning and for a further development of a teaching approach which we may continue to call "audio-lingual" (since the name very effectively describes the two main channels of language communication, the input and the output. This name should, however, not be associated with the conventional definition of an audio-lingual method). What we need is a flexible and progressive approach which is open to new developments and can incorporate and account for new observations in language acquisition.

Critical evaluations of assumptions of the Skinnerian behavioristic approach made by Chomsky[6]), Diebold[9]), Carroll[5]) and new findings by Jenkins[13]), Lenneberg[15]), and Brown-Bellugi[4]) seem to seriously question the primary and sole importance of the role of imitation in the development of speech skills.

One of the main concerns of current research is the problem of a redefinition of the encoding and decoding processes in language learning, their relationship, order and sequence. The question is whether awareness of a grammatical generalization occurs inductively by encoding, or primarily by decoding or by a combination of both. Chomsky says: "Utterances are composed and produced not simply by stringing together a sequence of responses under the control of outside stimulation and intraverbal association[7])." The psychologists Brown and Bellugi report about three processes in the child's acquisition of syntax: 1. imitation and reduction, 2. imitation with expansion and 3. induction of the latent structure. They stress the fact that there is a built-in lag which forces encoding to remain well behind decoding at every learning stage[4]). Chomsky adds: "The child's achievements in systematizing linguistic data at every stage go well beyond what he actually produces in normal speech[6])." Carroll criticizes

drill techniques frequently observed in audio-lingual programs complaining that "many elementary points are belabored *ad nauseam*[5])." Even the father of modern American behaviorism, B. F. Skinner, once says: "No one learns by repeating *per se*. He may learn so little that he needs to repeat and will learn more upon successive occasions but the repetition itself is not involved[25])." Emma Birkmayer, at a recent conference at Indiana University and in her Guide for Instruction in Modern Foreign Language for the State of Minnesota[2]), complains about stifling, unimaginative and sterile dialogues und boring rote learning in drill exercises. She points out that a few drills and pattern exercises daily for a week will give better results than many such drills and exercises bunched in one long session. Distributed practice rather than massed practice will enhance the speed of recall since the degree of overlearning in previous learning determines the amount of recall. She reminds us of the great motivational value of more mature informational content and the limited value of too onesided canned programs. Such limitations may be seen in some phases in the ALM materials and other most recent programs. Weaknesses in the treatment of structure and lexicon may among many other factors have caused the lower results in structural mastery among students of the otherwise highly valuable and interesting Multiple Credit Self-Instructional Elementary French Course at Indiana University[29]).

Another topic of research is the effectiveness of contrastive analysis in language teaching, brought down to the level of the student in the form of discrimination exercises and tests. William A. Henning[11]) [12]) as well as Theodore Mueller and Robert Harris[17]) report that discrimination training produced better pronunciation than mimicry alone: After a training period with practice in mimicry in the control group and with practice in discrimination only in the experimental group, Henning administered a pronunciation test followed by a phoneme discrimination test and a subsequent self-evaluation sound test, in which the students compared their own performance with the model.

Based on the research in sound discrimination[20]) some recent studies also favor structural discrimination drills[27]). Of special interest are finally Lado's and Lenneberg's studies on memory span and its limitation in foreign language learning. Lenneberg reports that the human memory is not capable of retaining a series of more than 10 random digits for immediate recovery and Lado warns that this factor should be carefully watched in audio-lingual teaching since memory spans are shorter for digits in the foreign language (also for blind students) [14]) [16]).

In the past eight years many audio-lingual programs were written and taught by well-motivated and well-prepared and less motivated and less prepared teachers with varying success as Politzer recently reported[22]) [23]). Some of these programs which originally were highly acclaimed are now being severely critized. Major critical comments taken from a recent survey were the following: "we are moving too slowly; pupils dislike pattern drills; the skills of reading and writing suffer; students express themselves well within familiar context but are lost out of it; the pre-reading period is too long; grammar is wrongly

neglected; drills are sometimes tiring; students are baby-fed; texts are too superficial; vocabulary and structure retention is worse than in the traditional method" etc. Camille B. Power in her review on the audio-lingual text "Modern Spanish" says: "An enthusiastic teacher, a language laboratory, above average students who are willing to spend hours practicing, and adherence to the author's recommendations are necessary for the successful use of this text and the lack of any one of these elements is sufficient reason to avoid the text[24])."
In learning a second language in any teacher-directed program it is rather obvious that we face a complexity of problems which are centered around the three T's: the Teacher, the Time and the Text. Here we are not concerned with the problems of the very important complementary relationship of teacher and teaching machine including the possibilities of the new instructional technology such as for instance the Dial Access and Retrieval System and the implementation of self-instructional or partly self-instructional programs. We would only like to present a few suggestions for an effective system control of improved audio-lingual programs in the light of Valdman's postulate for a development of "the natural use of language in an authentic cultural context[29])."
These suggestions are presented without claiming completeness. They only attempt to take into account some underlying major assumptions of several learning theories.

1. Speech patterns should be real and should be naturally embedded in frequent Gestalt-patterns of the language system.

2. Dialogues and reading selections should be built up logically and lend themselves to be segmented into minimal parts consistent with the natural use of language. This will have to consider the importance not only of the sentence as the basic unit for transformations but also the lexical, grammatical and rhetorical criteria of the largest linguistic unit, which is the paragraph[19]). Opposition against the dialogue as the basic form of language presentation at the elementary level can be met by more careful programming and control of the relationship of semantic reference to structural learning. Essential grammatical inventories should be placed in key positions of high informational value[7]) [19]).

3. The cultural (ethno-linguistic) significance and genuine representation of language phenomena should be determined and selected on the basis of frequency and social importance.

4. Vocabulary may have to be controlled according to the major criteria of usefulness and not of facility. It will then have to be defined according to frequency, range, availability for a certain semantic field and capacity of replacing other words i. e. "coverage" (Prof. Mackey of Lavalle University has given interesting clues to this new analysis).

5. Language programs should follow this general principle of procedure: From the "Gestalt" through the behavioral process back to the "Gestalt." Grammatical language patterns should be generated within a coherent situational frame and not primarily according to the logic of grammar. Drill exercises in themselves

not only the dialogue should reflect typical, frequent, and natural language processes (such as analogy, negation, question, extension, rejoinder, combination, *conclusive* substitution and transformation not just *grammatical*) and many exercises should make use of the hidden trick of incidental learning.

6. Grammatical difficulties should be well distributed and recur frequently, first passively for the purpose of decoding, taking into account the time lag between decoding and encoding in order to be practiced actively later.

7. The length of drill sentences should be carefully controlled within the constraints of the memory span.

8. Grammatical structures should be practiced in similar semantic context for easier transfer of training (e. g. groups of sentences should constitute a meaningful paragraph unit)[21][7].

9. The partial similarity in the semantic realm should be accompained by partial similarity in the realm of structure (i. e. similar constructions of practice sentences) so that the old is retained and the new is being created[21].

10. The structuration of the text in sequence, build-up, and grouping of grammatical phases, i. e. the didactic approach and the tactical procedure, should make use of transfer of training from the student's native language to the target language whenever possible. An example of this will be given in our forthcoming book in the treatment of the morpho-syntax of verbal constructs in tense transformations[1] (new classification of processes of vowel change in the transformation of tenses, viz. processes of the retention and change of the stem vowel can be taught in terms of the student's native language and transferred to the foreign language learning).

11. Dialogue sentences and sequences should lend themselves as models for creative drills and all new grammatical patterns should occur in the dialogue first. They should be presented in the dialogue by the teacher in such a way that the decoding process or the awareness of a new grammatical difficulty has already taken place there (or in previous occurences).

12. The correlation between teaching text and pattern practice should be carefully controlled. Too often in the past there was no correlation between the situational context of the text and that of the drill. The situational context of the drill shoud be based on the content of the text, so that situational context and lexicon are deepened and manipulated in the drill. The drill then can progress to other situational contexts to increase the manipulation facility of the student and to show the applicability and usefulness of a given pattern. Only then the student should be presented with variation dialogues or texts or asked to produce patterns learned in different context.

13. Grammatical discrimination training preceding verbal habit formation and reinforcement could be experimentally investigated before extensive incorporation into programs is attempted. I see three possibilities: contrastive analysis between mother tongue and target language; a build-up from already known features in the target language to new ones; and a programmed saturation phase of listening-discrimination practice before the encoding process begins.

It would go beyond the scope of this article to discuss the logical consequences of the new orientation required for an efficient testing phase, such as implemented in a few recent programs[28]). Be it said only that all testing should be a true reflection of the many-folded, varied, and yet succinctly specified training for different skills.

In closing we may draft these tentative preliminary notes as guidelines of linguistic and pedagogical research for a new theory of language learning:

1. Language

Language is a system
The system is the Gestalt
Structure is relationship
Language processes reflect postulated rewrite rules.

2. Language Acquisition

Language acquisition in the mother tongue is determined by internalized grammar which is inferred by generative grammar rules (the basic model underlying language competence).

Language acquisition in the Target Language does not equal language acquisition of the child in his native language. It utilizes "insight" or the cognition of Gestalt patterns, "awareness" through discrimination *and* habit formation as reinforcement for retention and production. It returns to the concept formation of "prägnant" features of the Gestalt.

Transformational-generative grammar however also here sets up some basic models underlying native competence which condition acquisition models for the foreign language learner. These models should utilize transfer of training from one language to the other wherever possible but always so in real-life situations in order to increase motivation and thus retention and to facilitate performance.

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